WHAT IS CLAIMED IS:

- 1. A herbicidal synergistic composition for the selective control of broad-leaved weeds and grasses in crops of useful plants resistant to protoporphyrinogen oxidase inhibitors, comprising, in addition to customary inert formulation auxiliaries, as active compounds a mixture of
- a) a herbicide which inhibits the action of protoporphyrinogen oxidases and
- b) at least one further pesticide selected from the group consisting of co-herbicides, fungicides and insecticides/parasites.
- 2. A composition according to claim 1, which comprises at least one further co-herbicide.
- 3. A herbicidal composition according to claim 2, comprising as herbicide a) a compound selected from the group of the diphenyl ethers, imides and phenylpyrazoles, and also fluazolate and thidiazimin.
- 4. A herbicidal composition according to claim 3, comprising as diphenyl ether acifluorphen, aclonifen, bifenox, chlornitrophen, ethoxyfen, fluoroglycofen-ethyl, fomesafen, lactofen or oxyfluorfen.
- 5. A herbicidal composition according to claim 3, comprising as imide azafenidin, carfentrazon-ethyl, cinidon-ethyl, flumiclorac-pentyl, flumioxazin, fluthiacet-methyl, oxadiargyl, oxadiazon, pentoxazone (KPP 314), sulfentrazone, flumipropyn, flupropacil, benzfendizone or the compound of the formula A

6. A herbicidal composition according to claim 3, comprising as phenylpyrazole nipyraclofen or pyraflufen-ethyl (ET 751).

- 7. A herbicidal composition according to claim 1 for controlling broad-leaved weeds and grasses in crops of maize, sugar beet, soya beans, rape, cotton, sunflowers, cereals, rice and sugar cane which are resistant to protoporphyrinogen oxidase inhibitors.
- 8. A herbicidal composition according to claim 1, for controlling weeds and grasses in crops of maize which are resistant to protoporphyrinogen inhibitors, where the co-herbicide b) is a compound selected from the group consisting of atrazine, terbuthylazine, (S)-metolachlor, metolachlor, terbutryn, simazine, dimethenamid or (S)-dimethenamid, flufenacet, acetochlor, alachlor, isoxaflutole, isoxachlortole, mesotrione, sulcotrione, metosulam, flumetsulam, pendimethalin, bromoxynil, bentazone, carfentrazone-ethyl, clomazone, nicosulfuron, rimsulfuron, halosulfuron-methyl, metribuzin, flumiclorac-pentyl, prosulfuron, primisulfuron-methyl, dicamba, fluthiacet-methyl, pyridate, 2,4-D, clopyralide, diflufenzopyr, fluroxypyr, MCPA, MCPB, mecoprop (MCPP), metobenzuron, thifensulfuron-methyl, aclonifen, EPTC, glyphosate, glufosinate, sulfosate and cyanazine, and compounds of the formulae A

$$CF_3 \xrightarrow{CH_3} O \xrightarrow{CH_3} CH_3 \xrightarrow{CH_2} CH \xrightarrow{CH_2} (A) \text{ and } B \xrightarrow{N=N} CI (B)$$

- 9. A herbicidal composition according to claim 8, where the co-herbicide b) is a compound selected from the group consisting of (S)-metolachlor, metolachlor, dimethenamid or (S)-dimethenamid, acetochlor and alachlor.
- 10. A herbicidal composition according to claim 9, comprising as additional component c) a safener of the benzoxazin type, in particular benoxacor, or MON 4660, flurazole, dichlormid or furilazole.
- 11. A herbicidal composition according to claim 1, for controlling weeds in crops of sugar beet resistant to protoporphyrinogen oxidase inhibitors, where the co-herbicide b) is a compound selected from the group consisting of metolachlor, (S)-metolachlor, propaquizafop, metamitron, pyramin, phenmedipham, desmedipham, ethofumesate, triasulfuron, chloridazon, lenacil, triallate, fluazifop, sethoxydim, quizalofop, fenoxaprop, glyphosate, glufosinate, sulfosate and clethodim.

- 12. A herbicidal composition according to claim 1, for controlling weeds in crops of soya resistant to photoporphyrinogen oxidase inhibitors, where the co-herbicide b) is a compound selected from the group consisting of metolachlor, (S)-metolachlor, oxasulfuron, fluthiacet-methyl, propaquizafop, alachlor, dimethenamid or (S)-dimethenamid, acifluorfen, benazolinethyl, bentazone, carfentrazone-ethyl, sulfentrazone, chlorimuron-ethyl, cloransulammethyl, thifensulfuron-methyl, clopyralid, flumiclorac-pentyl, flumetsulam, fomesafen, imazamox, imazaquin, imazethapyr, imazapyr, lactofen, pyridate, sethoxydim, fluazifop, quizalofop, clethodim, fenoxaprop(P-ethyl), thidiazuron, tribufos, pendimethalin, glyphosate, glufosinate, sulfosate and trifluralin.
- 13. A herbicidal composition according to claim 1, for controlling weeds in crops of rape resistant to protoporphyrinogen oxidase inhibitors, where the co-herbicide b) is a compound selected from the group consisting of dimethachlor, propaquizafop, clomazone, napropamide, quinmerac, metazachlor, carbetamide, dimefuron, propyzamide, clopyralid, ethametsulfuron-methyl, sethoxydim, fluazifop, quizalofop, clethodim, fenoxaprop(P-ethyl), glyphosate, glufosinate, sulfosate and tebutam.
- 14. A herbicidal composition according to claim 1, for controlling weeds in crops of cotton resistant to protoporphyrinogen oxidase inhibitors, where the co-herbicide b) is a compound selected from the group consisting of fluometuron, prometryn, metolachlor, (S)-metolachlor, norflurazon, propaquizafop, pyrithiobac-sodium, trifluralin, pendimethalin, bromoxynil, clomazone, MSMA, DMSA, fluazifop, quizalofop, fenoxaprop(P-ethyl), sethoxydim, clethodim, diuron, cyanazine, alachlor, acetochlor, flurochloridone, dithiopyr, thiazopyr, lactofen, oxyfluorfen, glyphosate, glufosinate, sulfosate and ethalfluralin, and also the compound of the formula C.
- 15. A herbicidal composition according to claim 1, for controlling weeds in crops of sunflowers resistant to protoporphyrinogen oxidase inhibitors, where the co-herbicide b) is a compound selected from the group consisting of metolachlor, (S)-metolachlor, pendimethalin, aclonifen, flurochloridon, prometryn, sethoxydim, fluazifop, quizalofop, clethodim, fenoxaprop(P-ethyl), terbutryn, acetochlor, glyphosate, glufosinate, sulfosate and trifluralin.
- 16. A herbicidal composition according to claim 1, for controlling weeds in crops of cereals resistant to protoporphyrinogen oxidase inhibitors, where the co-herbicide b) is a compound

selected from the group consisting of triasulfuron, prosulfuron, clodinafop, terbutryn, amidosulfuron, bromoxynil, carfentrazone-ethyl, dicamba, diclofop-methyl, diflufenican, ethoxysulfuron, fenoxaprop(P-ethyl), fentrazamide, flazasulfuron, florasulam, fluazolate, flucarbazone, flufenacet, flupyrsulfuron-methyl sodium, flurtamone, iodosulfuron, isoproturon, chlortoluron, MCPA, MCPB, mecoprop (MCPP), chlorsulfuron, metsulfuron-methyl, sulfosulfuron, thifensulfuron-methyl, tribenuron-methyl, 2,4-D, 2,4-DB, 2,4-DP, bifenox, ethametsulfuron-methyl, flamprop-M, imazamethabenz-methyl, ioxynil, bromoxynil, metosulam, pyridate, quinmerac, tralkoxydim, fluoroglycofen-ethyl, methabenzthiazuron, ethalfluralin, pendimethalin, trifluralin, isoxaben, prosulfocarb, triallate, clopyralid, fluroxypyr, benazolin-ethyl, glyphosate, glufosinate, sulfosate and difenzoquat-metilsulfate.

- 17. A herbicidal composition according to claim 16, where the co-herbicide b) is a compound selected from the group consisting of triasulfuron, prosulfuron, clodinafop, amidosulfuron, diclofop-methyl, fenoxaprop(P-ethyl), flazasulfuron, flupyrsulfuron-methyl sodium, iodosulfuron, mecoprop (MCPP), chlorsulfuron, metsulfuron-methyl, sulfosulfuron and thifensulfuron-methyl.
- 18. A herbicidal composition according to claim 17, comprising as additional component c) a safener of the quinoline type, in particular cloquintocet-mexyl.
- 19. A herbicidal composition according to claim 1, for controlling weeds in crops of rice resistant to protoporphyrinogen oxidase inhibitors, where the co-herbicide b) is a compound selected from the group consisting of pretilachlor, cinosulfuron, triasulfuron, fenclorim, clodinafop, bensulfuron-methyl, imazosulfuron, pyrazosulfuron-ethyl, metsulfuron-methyl, azimsulfuron, halosulfuron-methyl, esprocarb, mefenacet, molinate, propanil, pyrazolate, cyhalofop-butyl, fenoxaprop(P-ethyl), bispyribac-sodium, pyriminobac-methyl, cafenstrole, oxadiargyl, oxadiazon, bromobutide, MY-100, dymron, NB 061, MK243, HW-52, glyphosate, glufosinate, sulfosate and AC 014, and also the compound of the formula D.
- 20. A herbicidal composition according to claim 1, for controlling weeds in crops of sugar cane resistant to protoporphyrinogen oxidase inhibitors, where the co-herbicide b) is a compound selected from the group consisting of atrazine, ametryn, dicamba, terbutryn, prosulfuron, hexazinone, asulam, diuron, 2,4-D, halosulfuron-methyl, flazasulfuron, isoxaflutole, azafenidin, tebuthiuron, sulcotrione, pendimethalin, clomazone, metribuzin, thiazopyr, glyphosate, glufosinate, sulfosate and ethoxysulfuron, and also the compound of the formula C.